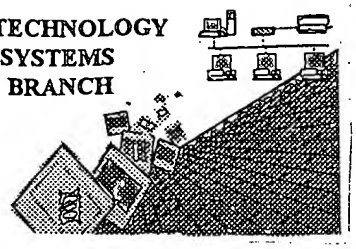
BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/757,333C
Source: 1619
Date Processed by STIC: 3/21/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

1619

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/757,333C

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4	Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 ✓	Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

1619

Does Not Comply
Corrected Diskette Needed

Errors on p. 2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/757,333C

DATE: 03/21/2002
TIME: 15:14:12

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

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     1 <110> APPLICANT: Achilefu, Samuel I.
     2       Rajagopalan, Raghavan
     3       Dorshow, Richard B.
     4       Bugaj, Joseph E.
     6       Mallinckrodt Inc.
     8 <120> TITLE OF INVENTION: Versatile Hydrophilic Dyes
    10 <130> FILE REFERENCE: MRD-67
    12 <140> CURRENT APPLICATION NUMBER: US 09/757,333C
    13 <141> CURRENT FILING DATE: 2001-01-09
    15 <150> PRIOR APPLICATION NUMBER: US 09/484,321
    16 <151> PRIOR FILING DATE: 2000-01-18
    18 <160> NUMBER OF SEQ ID NOS: 8
    20 <170> SOFTWARE: Patent-In Version 3.1
    22 <210> SEQ ID NO: 1
    23 <211> LENGTH: 8
    24 <212> TYPE: PRT
    25 <213> ORGANISM: Artificial Sequence
    27 <220> FEATURE:
W--> 28 <221> NAME/KEY: MOD RES
    29 <222> LOCATION: (1)...(8)
    30 <223> OTHER INFORMATION: Xaa at location 1 represents D-Phe. Artificial sequence
    31       is completely synthesized.
    32 <223> OTHER INFORMATION: Xaa at locations 2 and 7 represents Cys with an
    33       intramolecular disulfide bond between two Cys
    34       amino acids. Artificial sequence is completely synthesized.
    35 <223> OTHER INFORMATION: Xaa at location 4 represents D-Trp. Artificial sequence
    36       is completely synthesized.
    38 <400> SEQUENCE: 1
W--> 39  Xaa Xaa Tyr Xaa Lys Thr Xaa Thr
    40   1               5
    43 <210> SEQ ID NO: 2
    44 <211> LENGTH: 8
    45 <212> TYPE: PRT
    46 <213> ORGANISM: Artificial Sequence
    48 <220> FEATURE:
W--> 49 <221> NAME/KEY: MOD RES
    50 <222> LOCATION: (1)...(8)
    51 <223> OTHER INFORMATION: Xaa at location 1 represents D-Phe. Artificial sequence
    52       is completely synthesized.
    53 <223> OTHER INFORMATION: Xaa at locations 2 and 7 represents Cys with an
    54       intramolecular disulfide bond between two Cys
    55       amino acids. Artificial sequence is completely synthesized.
    56 <223> OTHER INFORMATION: Xaa at location 4 represents D-Trp. Artificial sequence
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RAW SEQUENCE LISTING DATE: 03/21/2002
PATENT APPLICATION: US/09/757,333C TIME: 15:14:12

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

```
     57       is completely synthesized.
     58 <223> OTHER INFORMATION: Xaa at location 8 represents Thr-OH. Artificial sequence
     59       is completely synthesized.
     61 <400> SEQUENCE: 2
W--> 62  Xaa Xaa Tyr Xaa Lys Thr Xaa Xaa
     63   1               5
     65 <210> SEQ ID NO: 3
     66 <211> LENGTH: 11
     67 <212> TYPE: PRT
     68 <213> ORGANISM: Peptide
     70 <400> SEQUENCE: 3
     71  Gly Ser Gly Gln Trp Ala Val Gly His Leu Met
     72   1               5                   10
     75 <210> SEQ ID NO: 4
     76 <211> LENGTH: 11
     77 <212> TYPE: PRT
     78 <213> ORGANISM: Peptide
     80 <400> SEQUENCE: 4
     81  Gly Asp Gly Gln Trp Ala Val Gly His Leu Met
     82   1               5                   10
     85 <210> SEQ ID NO: 5
     86 <211> LENGTH: 8
     87 <212> TYPE: PRT
     88 <213> ORGANISM: Peptide
     90 <400> SEQUENCE: 5
     91  Asp Tyr Met Gly Trp Met Asp Phe
     92   1               5
     95 <210> SEQ ID NO: 6
     96 <211> LENGTH: 8
     97 <212> TYPE: PRT
     98 <213> ORGANISM: Artificial Sequence
    100 <220> FEATURE:
W--> 101 <221> NAME/KEY: MOD RES
    102 <222> LOCATION: (1)...(8)
    103 <223> OTHER INFORMATION: Xaa at locations 3 and 6 represents Norleucine.
    104       Artificial sequence is completely synthesized.
    106 <400> SEQUENCE: 6
W--> 107  Asp Tyr Xaa Gly Trp Xaa Asp Phe
    108   1               5
    110 <210> SEQ ID NO: 7
    111 <211> LENGTH: 8
    112 <212> TYPE: PRT
    113 <213> ORGANISM: Artificial Sequence
    115 <220> FEATURE:
W--> 116 <221> NAME/KEY: MOD RES
    117 <222> LOCATION: (1)...(8)
    118 <223> OTHER INFORMATION: Xaa at location 1 represents D-Asp. Artificial sequence
    119       is completely synthesized.
    120 <223> OTHER INFORMATION: Xaa at locations 3 and 6 represents Norleucine.
```

invalid response, see error summary sheet item 10

same error

same error

RAW SEQUENCE LISTING DATE: 03/21/2002
PATENT APPLICATION: US/09/757,333C TIME: 15:14:12

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

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     121       Artificial sequence is completely synthesized.
     123 <400> SEQUENCE: 7
W--> 124  Xaa Tyr Xaa Gly Trp Xaa Asp Phe
     125   1               5
     128 <210> SEQ ID NO: 8
     129 <211> LENGTH: 8
     130 <212> TYPE: PRT
     131 <213> ORGANISM: Artificial Sequence
     133 <220> FEATURE:
W--> 134 <221> NAME/KEY: MOD RES
     135 <222> LOCATION: (1)...(8)
     136 <223> OTHER INFORMATION: Xaa at location 1 represents D-Lys. Artificial sequence
     137       is completely synthesized.
     139 <400> SEQUENCE: 8
W--> 140  Xaa Pro Arg Arg Pro Tyr Ile Leu
     141   1               5
```

VERIFICATION SUMMARY DATE: 03/21/2002
PATENT APPLICATION: US/09/757,333C TIME: 15:14:13

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

L:28 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:49 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:101 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:116 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:134 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

RAW SEQUENCE LISTING DATE: 03/21/2002
PATENT APPLICATION: US/09/757,333C TIME: 15:14:12

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

```
     57       is completely synthesized.
     58 <223> OTHER INFORMATION: Xaa at location 8 represents Thr-OH. Artificial sequence
     59       is completely synthesized.
     61 <400> SEQUENCE: 2
W--> 62  Xaa Xaa Tyr Xaa Lys Thr Xaa Xaa
     63   1               5
     65 <210> SEQ ID NO: 3
     66 <211> LENGTH: 11
     67 <212> TYPE: PRT
     68 <213> ORGANISM: Peptide
     70 <400> SEQUENCE: 3
     71  Gly Ser Gly Gln Trp Ala Val Gly His Leu Met
     72   1               5                  10
     75 <210> SEQ ID NO: 4
     76 <211> LENGTH: 11
     77 <212> TYPE: PRT
     78 <213> ORGANISM: Peptide
     80 <400> SEQUENCE: 4
     81  Gly Asp Gly Gln Trp Ala Val Gly His Leu Met
     82   1               5                  10
     85 <210> SEQ ID NO: 5
     86 <211> LENGTH: 8
     87 <212> TYPE: PRT
     88 <213> ORGANISM: Peptide
     90 <400> SEQUENCE: 5
     91  Asp Tyr Met Gly Trp Met Asp Phe
     92   1               5
     95 <210> SEQ ID NO: 6
     96 <211> LENGTH: 8
     97 <212> TYPE: PRT
     98 <213> ORGANISM: Artificial Sequence
    100 <220> FEATURE:
W--> 101 <221> NAME/KEY: MOD RES
    102 <222> LOCATION: (1)...(8)
    103 <223> OTHER INFORMATION: Xaa at locations 3 and 6 represents Norleucine.
    104       Artificial sequence is completely synthesized.
    106 <400> SEQUENCE: 6
W--> 107  Asp Tyr Xaa Gly Trp Xaa Asp Phe
    108   1               5
    110 <210> SEQ ID NO: 7
    111 <211> LENGTH: 8
    112 <212> TYPE: PRT
    113 <213> ORGANISM: Artificial Sequence
    115 <220> FEATURE:
W--> 116 <221> NAME/KEY: MOD RES
    117 <222> LOCATION: (1)...(8)
    118 <223> OTHER INFORMATION: Xaa at location 1 represents D-Asp. Artificial sequence
    119       is completely synthesized.
    120 <223> OTHER INFORMATION: Xaa at locations 3 and 6 represents Norleucine.
```

invalid response, see error summary sheet item 10

same error

same error

1619

Does Not Comply
Corrected Diskette Needed

Errors on p. 2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/757,333C

DATE: 03/21/2002
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Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

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      1 <110> APPLICANT: Achilefu, Samuel I.
      2       Rajagopalan, Raghavan
      3       Dorshow, Richard B.
      4       Bugaj, Joseph E.
      6       Mallinckrodt Inc.
      8 <120> TITLE OF INVENTION: Versatile Hydrophilic Dyes
     10 <130> FILE REFERENCE: MRD-67
     12 <140> CURRENT APPLICATION NUMBER: US 09/757,333C
     13 <141> CURRENT FILING DATE: 2001-01-09
     15 <150> PRIOR APPLICATION NUMBER: US 09/484,321
     16 <151> PRIOR FILING DATE: 2000-01-18
     18 <160> NUMBER OF SEQ ID NOS: 8
     20 <170> SOFTWARE: Patent-In Version 3.1
     22 <210> SEQ ID NO: 1
     23 <211> LENGTH: 8
     24 <212> TYPE: PRT
     25 <213> ORGANISM: Artificial Sequence
     27 <220> FEATURE:
W--> 28 <221> NAME/KEY: MOD RES
     29 <222> LOCATION: (1)...(8)
     30 <223> OTHER INFORMATION: Xaa at location 1 represents D-Phe. Artificial sequence
     31       is completely synthesized.
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     33       intramolecular disulfide bond between two Cys
     34       amino acids. Artificial sequence is completely synthesized.
     35 <223> OTHER INFORMATION: Xaa at location 4 represents D-Trp. Artificial sequence
     36       is completely synthesized.
     38 <400> SEQUENCE: 1
W--> 39  Xaa Xaa Tyr Xaa Lys Thr Xaa Thr
     40   1               5
     43 <210> SEQ ID NO: 2
     44 <211> LENGTH: 8
     45 <212> TYPE: PRT
     46 <213> ORGANISM: Artificial Sequence
     48 <220> FEATURE:
W--> 49 <221> NAME/KEY: MOD RES
     50 <222> LOCATION: (1)...(8)
     51 <223> OTHER INFORMATION: Xaa at location 1 represents D-Phe. Artificial sequence
     52       is completely synthesized.
     53 <223> OTHER INFORMATION: Xaa at locations 2 and 7 represents Cys with an
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     55       amino acids. Artificial sequence is completely synthesized.
     56 <223> OTHER INFORMATION: Xaa at location 4 represents D-Trp. Artificial sequence
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Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03212002\I757333C.raw

```
     121       Artificial sequence is completely synthesized.
     123 <400> SEQUENCE: 7
W--> 124  Xaa Tyr Xaa Gly Trp Xaa Asp Phe
     125   1               5
     128 <210> SEQ ID NO: 8
     129 <211> LENGTH: 8
     130 <212> TYPE: PRT
     131 <213> ORGANISM: Artificial Sequence
     133 <220> FEATURE:
W--> 134 <221> NAME/KEY: MOD RES
     135 <222> LOCATION: (1)...(8)
     136 <223> OTHER INFORMATION: Xaa at location 1 represents D-Lys. Artificial sequence
     137       is completely synthesized.
     139 <400> SEQUENCE: 8
W--> 140  Xaa Pro Arg Arg Pro Tyr Ile Leu
     141   1               5
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/757,333C

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L:49 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:101 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:116 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:134 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8